AMENDMENTS TO THE CLAIMS

Please amend the claims as detailed below.

1. (Currently amended) An electromechanical switch comprising:
a signal contact;
an actuation electrode;
a beam to electrically couple to the signal contact through a conductive path between the beam and the signal contact that occurs at a time when an actuating voltage is applied to the actuation electrode and the beam engages the signal contact; and
a ~~metallic~~ coating to at least facilitate the existence of an arc reduction environment.

2. (Currently amended) The electromechanical switch of claim 1, further comprising:
a cap coupled to a substrate to substantially enclose the signal contact, the actuation electrode, the beam, and the ~~metallic~~ coating; and
the cap and the substrate cooperate to define the boundaries of the arc reduction environment.

3. (Currently amended) The electromechanical switch of claim 1, wherein the ~~metallic~~ coating comprises a conductive hydride.

4. (Currently amended) The electromechanical switch of claim 1, wherein the ~~metallic~~ coating is a conductive coating disposed between the beam and at least one of a group consisting of the signal contact and the actuation electrode.

5. (Currently amended) The electromechanical switch of claim 4, wherein the ~~metallic~~ conductive coating is applied to at least one of a group consisting of the actuation electrode, the signal contact, a first portion of the beam corresponding to the actuation electrode, and a second portion of the beam corresponding to the signal contact.

6. (Currently amended) The electromechanical switch of claim 5, wherein
the signal contact, the actuation electrode, and the beam are comprised of respective materials having respective coefficients of secondary electron emissions, and
the ~~metallic~~ conductive coating is comprised of a material having a coefficient of secondary electron emission approximately lower than the coefficients of secondary electron emissions of the material over which it is applied.

7. (Currently amended) The electromechanical switch of claim 6, wherein the ~~metallic~~ conductive coating ~~includes~~ consists of titanium or a titanium alloy.

8. (Original) The electromechanical switch of claim 1, further comprising:
a protuberance disposed on a portion of the beam corresponding to the signal contact.

9. (Currently amended) The electromechanical switch of claim 8, wherein at least a portion of the ~~metallic~~ coating is applied to the protuberance.

10. (Currently amended) The electromechanical switch of claim 8, wherein at least a portion of the ~~metallic~~ coating comprises the protuberance.

11.-17. (Previously canceled)

18. (Currently amended) A system comprising:
a bus;
a memory coupled to the bus; and
a circuit coupled to the bus, the circuit including an electromechanical switch having a signal contact, an actuation electrode, a beam to ~~engage~~ electrically couple to the signal contact through a conductive path between the beam and the signal contact that occurs at a time when a voltage is applied to the actuation electrode and the beam engages the signal contact, and a ~~metallic~~ coating to facilitate the existence of an arc reduction environment.

19. (Currently amended) The system of claim 18, wherein the ~~metallic~~ coating comprises a conductive hydride.

20. (Currently amended) The system of claim 18, wherein the ~~metallic~~ coating is a conductive coating applied to at least one of a group consisting of the actuation electrode, the signal contact, a first portion of the beam corresponding to the actuation electrode, and a second portion of the beam corresponding to the signal contact.

21. (Currently amended) The system of claim 20, wherein
the signal contact, the actuation electrode, and the beam are comprised of respective materials having respective coefficients of secondary electron emissions; and
the ~~metallic~~ conductive coating is comprised of a material having a coefficient of secondary electron emission lower than the coefficients of secondary electron emissions of the material over which it is applied.

22. (Currently amended) The system of claim 21, wherein the ~~metallic~~ conductive coating ~~includes~~ consists of titanium or a titanium alloy.

23. (Original) The system of claim 18, wherein the circuit further includes a processor.

24. (Original) The system of claim 23, wherein the system is a selected one of a group consisting of a network router, a wireless mobile phone, and a personal digital assistant.

25. (Previously withdrawn) A method comprising:

transmitting a signal to an input of an enclosed switch having a beam, a signal contact and an actuation electrode selectively actuatable to couple the beam to the signal contact, the enclosed switch further having a coating to reduce a likelihood of a generation of an arc within the enclosed switch; and

applying an actuating voltage to the actuation electrode to couple the beam to the signal contact.

26. (Previously withdrawn) The method of claim 25, wherein the coating comprises a hydride and applying an actuating voltage heats the hydride coating to a point that hydrogen is released, the released hydrogen increasing a pressure within the enclosed switch.

27. (Previously withdrawn) The method of claim 25, further comprising:

transmitting the signal to an output of the enclosed switch when the beam is coupled to the signal contact.

28. (Previously withdrawn) The method of claim 25, wherein the coating is applied to at least one of a group consisting of the actuation electrode, the signal contact, a first portion of the beam corresponding to the actuation electrode, and a second portion of the beam corresponding to the signal contact.

29. (Previously withdrawn) The method of claim 25, wherein

the signal contact, the actuation electrode, and the beam are comprised of respective materials having respective coefficients of secondary electron emissions; and

the coating is comprised of a material having a coefficient of secondary electron emission lower than the coefficients of secondary electron emissions of the material over which it is applied.

30. (Canceled)

31. (New) The electromechanical switch of claim 1, wherein the conductive path between the beam and the signal contact occurs at a time that the beam engages the signal contact.

32. (New) The system of claim 18, wherein the conductive path between the beam and the signal contact occurs at a time the beam engages the signal contact.